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Tae Joon Park

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EXAMINER

SHERR, CRISTINA O

ART UNIT

PAPER NUMBER

3685

NOTIFICATION DATE

DELIVERY MODE

12/16/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 09/592,148	<b>Applicant(s)</b> PARK, TAE JOON	
	<b>Examiner</b> CRISTINA SHERR	<b>Art Unit</b> 3685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2010 and 25 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 141-143, 145-150, 152, 154 and 155 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 141-143, 145-150, 152, 154 and 155 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/25/2010</u> .                                              | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is in response to Applicant's Amendment filed October 25, 2010, and Supplemental Amendment filed November 25, 2010. Claims 132-140, 144, 151, and 153 have been canceled. Claims 141-143, 145-148, and 150 have been amended. Also, claim 141 has been additionally amended, via the Supplemental Amendment. Accordingly, claims 141-143, 145-150, 152, 154, and 155 are currently pending in this case.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 25, 2010 has been entered.

#### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on October 25, 2010 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Response to Arguments***

4. Applicant's arguments, see **REMARKS**, filed October 25, 2010, with respect to the section 101 rejection of claims 141-143, 145-149, as currently amended, have been fully considered and are persuasive. The section 101

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rejection of claims 141-143, 145-149, as currently amended, has been withdrawn.

5. Applicant's arguments, see **REMARKS**, filed October 25, 2010, with respect to the section 112 rejection of claim 141, as currently amended, have been fully considered and are persuasive. The section 112 rejection of claim 141, as currently amended, has been withdrawn.

6. Applicant's arguments, see **REMARKS**, filed October 25, 2010, with respect to the section 102 rejection of claims 150, 152, 154, and 155, as currently amended, have been fully considered and are persuasive. The section 102 rejection of claims 150, 152, 154, and 155, as currently amended, has been withdrawn.

7. Applicant's arguments filed October 25, 2010, regarding the Section 103 rejection of claims 141-143, 145-150, 152, 154, and 155, as currently amended, have been fully considered but they are not persuasive.

8. Applicant argues, regarding independent claims 141 and 150, as currently amended, that nothing in the cited prior art teaches, discloses, or suggests "a descrambler to descramble the first data block and one or more succeeding data blocks among the plurality of data blocks based on the control data included in the first data block, each of the scrambled data units including scrambled digital video data or scrambled digital audio data, wherein the same descrambler is used to descramble both the scrambled digital video data and the scrambled digital audio data".

9. Examiner respectfully disagrees. Roth discloses

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“Each frame comprises 728 bits and they are transmitted with a speed of 1000 frames per second, i.e. a total bit rate of 728 kbit/s. Each frame begins with a frame alignment word FAW consisting of eight bits. Thereafter, five control bits C0-C4 are transmitted, which for instance determines the type of information being transmitted. Then there is 11 additional data AD bits AD0-AD10, which may be used for transmitting optional information. In accordance with the present invention preferably the first bit AD0 is utilized to transmit a control word and the cryptosyn-chronization word” (col 2 ln 33-44).

Further, “it is possible to let the same control word be valid during an extended time” (col 4 ln 15-19).

Bourel discloses

“The two video and sound parts are completely independent and the pseudo-random generators 25 and 28 are distinct generators. Nevertheless, a single device 27 for decrypting and restoring the control word received from the receiver section 26 is present for both the sound signal and the video signal.” (col 5 ln 46-52)

10. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Roth to include detecting the control data based on a signal associated with the position of the control data within the first sub data unit as disclosed in Bourel in order to allow for the use of a single control word for both an audio and video signal.

### ***Remarks***

11. Note that Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. MPEP §2106 II C. In this case, the

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term “when” in claim 141 does not actually require steps to be taken, and thus the recitation does not serve to further distinguish the claims from the prior art.

***Claim Rejections - 35 USC § 112***

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claims 141-143, 145-146, 152, and 154 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

14. Note that Applicant’s original specification does not appear to support the amendments to the claims. See, e.g., page 10 of the specification. Further, the specification does not support --

- the deletion of the word "magnetic" (page 8), and "tape" (page 10)
- the addition of “copy prevention based on the type of input signal” (page 10)
- recording on anything other than a magnetic medium such as a “tape” (page 10), e.g. “when the recording medium is a video tape” (page 14)
- the “examples” in Applicant’s REMARKS (page 16, page 18).

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 141-143 and 145-149 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

17. In this case, claim 141 recites "determining a number of transport packets. . . when . . . minimum . . .", where it is unclear what is meant by "minimum" (8? 12? 55%?) or "when" (after? within 2 minutes?).

18. For these reasons, independent claim 141 and its dependent claims 142, 143, and 145-149 are rejected under 35 U.S.C. 112, second paragraph.

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 141-143, 145-146, 152, and 154 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (US 5,243,650) in view of Bourel (US 5,530,756).

21. Regarding claims 141 and 150 -

22. Roth discloses an apparatus for processing digital data, the apparatus comprising:

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a processor and a memory connected to the processor and including executable instructions that when executed by the processor, (e.g. fig. 2; col 1:57-60; col 2:36-47, 55-57; col 3:2-4, 30-38; col 3:66-4:6; col 4:15-20)

cause the processor to perform:

receiving digital data including a plurality of transport packets having a header and a scrambled data unit; detecting a header of a first transport packet included in the plurality of transport packets; extracting a marker from the header of the first transport packet; extracting first control data from the extracted marker; (e.g. fig. 2; col 1:57-60; col 2:36-47, 55-57; col 3:2-4, 30-38; col 3:66-4:6; col 4:15-20) determining a number of transport packets that have been processed, and when the processor determines the number of transport packets is a minimum of a multiple of four transport packets, the executable instructions further cause the processor to perform detecting the header of a next transport packet included in the plurality of transport packets; extracting a marker from the header of the next transport packet; extracting second control data from the extracted marker (e.g. fig 4; col 3:30-38; col 4:15-29).

23. Roth does not disclose wherein the same descrambler is used to descramble both the scrambled digital video data and the scrambled digital audio data; and a controller, operatively coupled to the descrambler, to control the descrambling operation by the descrambler. Bourel, however, does, at col 5 ln 46-63.

24. Roth does not disclose wherein each of the one or more scrambled data units and the one or more succeeding data units including scrambled digital



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video data or scrambled digital audio data. Bourel, however, does at col 4 ln 14-25.

25. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Roth to include detecting the control data based on a signal associated with the position of the control data within the first sub data unit as disclosed in Bourel in order to allow for the use of a single control word for both an audio and video signal.

26. Regarding claims 142 and 151 –

27. Roth discloses initializing the descrambler using the first and second control data for performing the descrambling operation. (col 3:66-4:29).

28. Regarding claims 143 and 152 –

29. Roth does not specifically disclose wherein the descrambler is configured to descramble each scrambled data unit: except for the header: in each of the plurality of data blocks.

30. Bourel, however, does disclose wherein the descrambler is configured to descramble each scrambled data unit: except for the header: in each of the plurality of data blocks. (e.g. col 5 ln 46- col 6 ln 5).

31. Regarding claims 145 and 154 –

32. Roth does not specifically disclose wherein at least two of the scrambled data units and the header including the control data comprise one data group, the header including the control data, and wherein the apparatus further comprises a demultiplexer to separate the at least two scrambled data units and

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the header from one data group before the descrambling. Bourel, however, does.  
(e.g. col 5 ln 46- col 6 ln 5).

33. Regarding claim 146 –

34. Bourel discloses wherein the data group includes at least two packets, at least the first packet including one data unit and the header, and wherein the executable instructions further cause the processor to perform demultiplexing the at least two packets from one data group. (e.g. col 5 ln 63- col 6 ln 5).

35. Claims 147-149, and 155 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (US 5,243,650) in view of Bourel (US 5,530,756), further in view of Kanota et al (US 5,418,853).

36. Roth and Bourel disclose a discussed above.

37. Regarding claims 147, 148, and 155 –

38. Roth and Bourel do not disclose copy prevention information, the copy prevention information including one of current generation information and allowable generation information, the current generation information indicating a number of times the digital data has been copied and the allowable generation information indicating a number of permitted copies of the digital data, and wherein the method further comprises: performing a copy prevention function such that copying of digital data is not permitted if the copy prevention information indicates that copying of digital data is not permitted. Kanota, however, does, at fig 2; col 4 ln 61-col 5 ln 14.

39. It would have been obvious to one of ordinary skill in the art to combine Bourel, Roth and Kanota in order to include detecting the control data based on a

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signal associated with the position of the control data within the first sub data unit as disclosed in Bourel in order to allow for the use of a single control word for both an audio and video signal when the signal are not synchronized and further to combine with Kanota since the encryption of software or digital data in Roth is equivalent to copy control as in Kanota.

40. Regarding claim 149 –

41. Roth and Bourel do not disclose wherein the descrambling step is performed only if the copy prevention information indicates that copying of digital data is permitted.

42. Kanota, however, does, at, e.g., col 5 ln 1-15.

### ***Conclusion***

43. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

44. Walker et al (US 5,054,064) disclose a video control system for recorded programs.

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRISTINA SHERR whose telephone number is (571)272-6711. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

46. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin L. Hewitt, II can be reached on (571)272-6709.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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47. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRISTINA OWEN SHERR  
Examiner  
Art Unit 3685

/Calvin L Hewitt II/  
Supervisory Patent Examiner, Art Unit 3685